An innovative procedure that could help lower your blood pressure.
High blood pressure is a serious condition that could lead to heart disease, heart and kidney failure, stroke, and other health problems.

Learn about an innovative procedure that could help you lower your blood pressure.

Because, when it comes to managing high blood pressure – lower is better.
HOW CAN I LOWER MY BLOOD PRESSURE?

LIFESTYLE CHANGES
Incorporating these healthy habits can help lower your blood pressure:

- Getting plenty of exercise
- Reducing sodium intake
- Limiting alcohol
- Maintaining a healthy weight
- Quitting smoking
- Managing stress
- Eating a diet rich in fruits and vegetables
- Reducing total fat intake

MEDICATIONS
For some people, lifestyle changes alone are not sufficient, and their doctor may prescribe one or more medications to manage high blood pressure.

It is important to take all blood pressure medications as your doctor prescribes, even if you do not feel physically different. Unfortunately, nearly half of all patients stop taking their medications within one year of starting them.

WHAT ELSE?
A lot of people with high blood pressure find that lifestyle changes and medication aren’t enough to control their condition. If you’re like them, you’re probably looking for additional options. The Blood Pressure Procedure (also known as RDN, or renal denervation) may be able to help.

ABOUT THE BLOOD PRESSURE PROCEDURE (RDN)

HOW DOES IT WORK?
This innovative procedure targets specific nerves near the kidneys that can become over-active and cause high blood pressure. It works by delivering energy to the over-active nerves to decrease their activity.

WHAT HAPPENS DURING THE PROCEDURE?
The procedure typically takes about an hour to perform and involves a small tube being temporarily inserted into the artery that supplies blood to the kidneys.

The procedure works by delivering energy directly to these over-active nerves to decrease their activity.

HOW CAN IT HELP ME?
The Blood Pressure Procedure (RDN) could help lower your blood pressure which in turn can help lower the risk of further damage to your heart, kidneys and blood vessels.

*Individual procedure times may vary.
Philip’s family suffers from various heart conditions on both sides. Philip himself has suffered from high blood pressure for a while, but he never went to see a doctor, despite his wife’s repeated requests.

It was only when a nurse came to his workplace that he asked her to take his blood pressure, upon which she immediately sent him to the doctor.

Philip, whose blood pressure levels were critically high, was diagnosed with high blood pressure in the mid-1990s. Only then did he learn about the severe risks of this condition.

Following the diagnosis, he was put on different medication approximately every two months in an attempt to manage his blood pressure - with little success in lowering his blood pressure.

After learning about the RDN procedure, Philip was very pleased that he was eligible for RDN. Although scared of hospitals, he underwent the procedure with a positive attitude and claimed that contrary to his expectations, he only noticed a slight discomfort. After the procedure, Philip measured his blood pressure twice a day for two months and saw his blood pressure go down.

Mary knows the risks of high blood pressure very well – she comes from a family with a long history of heart conditions and has had her own personal struggle with high blood pressure for over 40 years.

Over time she tried to control her blood pressure with different medications, but without much success. Headaches and an overall uncomfortable feeling, the unpleasant side effects of her medications, and – most importantly – a constant awareness that something serious, like a stroke or heart attack, could happen at any given time, were part of her day-to-day life.

After learning about the RDN procedure, Mary was screened by her doctor and was very happy to learn that she was eligible to receive the procedure. It gave her hope that after all these years, something could still be done to help her better manage her high blood pressure. Mary underwent the Blood Pressure Procedure, which she says changed her life completely.
ANY OTHER QUESTIONS?

We understand that you may have many questions about the Blood Pressure Procedure. Medtronic recommends that patients interested in the procedure should consult their doctor to understand the potential benefits and risks of the procedure. See the safety information and potential risks outlined on Page 10.

Below are some answers to the most common questions about the Blood Pressure Procedure or RDN.

WILL MY KIDNEYS WORK THE SAME AS THEY DID BEFORE THE PROCEDURE?
Clinical trials have shown no detrimental effect on the kidney function from the procedure.

WILL ANYTHING BE IMPLANTED INTO MY BODY?
The RDN procedure requires no implant to the kidneys or the arteries near the kidney.

WHEN CAN I GO HOME?
Most people are able to go home within a day or two of the procedure. Your doctor will let you know the length of time you will have to stay in the hospital and when you can resume your normal activities.

WHEN CAN I RESUME MY REGULAR ACTIVITIES?
Your doctor will advise you. Many patients can return to work and follow their normal routines within a few days of the procedure.

CAN I STOP TAKING MY ANTIHYPERTENSIVE MEDICATION FOLLOWING THE PROCEDURE?
Following the RDN procedure, your doctor will continue to monitor you and advise you regarding your medications and any potential for adjusting or modifying your prescriptions. It is important to take all medications as directed by your doctor.

I’M INTERESTED. WHAT SHOULD I DO NEXT?
Learn more about the Blood Pressure Procedure on our dedicated website: www.BloodPressureProcedure.com
SAFETY INFORMATION
AND POTENTIAL RISKS

Talk with your doctor about potential risks associated with the procedure.

The primary risks of the renal denervation procedure are similar to the risks of all diagnostic procedures requiring catheterization of the arteries of the body. The following are potential risks of the catheterization procedure (including renal angiogram):

Uncommon < 10% (less than 1 in 10 chance), temporary and not severe unless otherwise indicated
- Nausea or vomiting
- Complications associated with the use of any pain or anxiety medication during or after the procedure
- Complications at catheter insertion site in the groin
- Pain
- Bruising
- Hematoma (collection of blood outside a blood vessel)

Rare < 1% (less than 1 in 100 chance), temporary and not severe unless otherwise indicated
- Embolism - Formation and dislodgement of a blood clot or dislodgement of cholesterol/plaque within the blood vessel, which travels downstream into small vessels, blocking blood flow and causing temporary or permanent damage to organs in the body. Clots are known to cause heart attack, stroke, kidney damage, or threaten circulation to arms or legs and may ultimately lead to incapacitation or death
- Vascular complications requiring surgery
- Pseudoaneurysm (injury to the artery wall resulting in a build-up of blood under the skin)
- Arteriovenous fistula (an abnormal connection or passageway between an artery and a vein)
- Complications associated with the contrast agent used during the procedure, e.g., serious allergic reaction or reduced kidney function

Very Rare < 0.1% (less than 1 in 1000 chance)
- Complications at catheter insertion site in the groin
- Infec tion
- Significant bleeding
- Retroperitoneal bleeding (bleeding into the abdominal space)
- Cardiopulmonary arrest
- Death

There are additional risks that could possibly be associated with the denervation procedure/response to treatment.

These complications have not yet been quantified. These potential risks may include:
- Pain – during or after the procedure that may require treatment with pain medications.
- Damage to one or both kidneys, loss of kidney function, and/or need to remove a kidney. If severe enough, this could require dialysis.
- Damage to the blood vessel wall or other body structures from the delivery of energy, e.g., renal artery stenosis (narrowing of blood vessel), spasm, or aneurysm (ballooning of blood vessel wall).
- Hypertension (blood pressure too high)
- Hypotension (blood pressure too low)
- Hematuria (blood in urine)
- Hemorrhage (significant blood loss)
- Proteinuria (increased amount of protein in urine)
- Allergic and/or adverse reaction from insertion of foreign body (e.g. catheter)
- Electrolyte disturbances (e.g., changes in the amount of salt in blood/urine)
- Skin burn

Pregnancy
The device has not been evaluated in patients who are pregnant, nursing, or plan to become pregnant.
This booklet is designed to help you learn more about the Medtronic Blood Pressure Procedure called RDN.

This patient brochure is intended for informational purposes only and does not contain medical advice. This brochure should not be used as an alternative to consulting with your doctor. Instead you should speak to your doctor to obtain additional information or to discuss any questions that you may have. You should discuss with your doctor questions specific to your health and the treatment options that are appropriate for you.

Please also bear in mind that the patient testimonials provided are experiences specific to particular patients. One person’s experience and results are influenced by many factors, and may vary from patient to patient. Always talk with your doctor about diagnosis and treatment, and ensure that you understand and carefully follow the information you are given.

www.BloodPressureProcedure.com

**References**

4. Sanders, Blankestijn et. al. Nephrology Dialysis Transplantation. Apr 2017